
Town of Ledyard
Planning and Zoning Commission
Application: 1737-1761 Route 12, Ledyard, Connecticut
Land Use and Impact to Proximate Properties
October 10, 2024

As part of Goman+York’s Fiscal and Economic Impact Study, I was asked to opine on the potential impact—specifically, the impact on property value—of the site preparation activity (the resource extraction), on proximate residential properties. As an urban geographer and land use planner, my 30 years of experience and academic research have focused on the intersection of land use, land use regulations, and real property markets. This has included extensive literature reviews of academic and industry research on the impact of commercial, industrial, and residential development on neighboring and proximate property values. To accomplish the task of offering a professional planning and expert opinion as to the potential impacts of the proposed application, specifically, the site preparation work that will extract earth material from the site, I will provide a land use perspective addressing zoning considerations of nearby dissimilar uses. In addition, I will present academic research on this topic. What I will not do is attempt to make a *statement of value* for any specific property or properties. Last, I will provide my professional opinion as to the existing industrial site, the proposed application and activities, and its relationship to neighboring and proximate residential uses.

A good starting point for this discussion begins with what is typically known as local undesirable land uses (LULUs). Historically, LULUs were limited to the most undesirable land uses such as airports, heavy industry, landfills, and refineries. However, in recent years, resident opposition to land uses has expanded into a multiplicity of land uses, such as retail, mixed-use developments, distribution, manufacturing, and even multi-family residential uses¹. This, by Matthews (2006), explains

Local elected officials and policy makers are frequently confronted with homeowners protesting that the presence of new commercial development, especially if it is close by, will run down their property values. This is the well-known NIMBY (Not In My Back Yard) syndrome. This NIMBY reaction occurs when regulatory permission is sought for development that ranges from “7-11” convenience stores to regional malls. Local homeowners make their claim of threatened property values arguing that “everybody knows” it is true. Local officials are confronted with difficult choices and little empirical information (Matthews 2006: xiii).²

I am confident that Ledyard has experienced similar NIMBY reactions and claims. A fact that must be considered related to such reactions and claims is that “such regulations shall be made with reasonable consideration...to the character of the district...with a view to conserving the value of buildings” (Zoning

¹ MIT Center for Real Estate, *Effects of Mixed-Income, Multi-Family Rental Housing Developments on Single-Family Housing Values* (2005). Harvard Joint Center for Housing Studies, *The Vitality of America’s Working Communities* (2003), found that apartments posed no threat to surrounding single-family house values. Kem C. Gardner Policy Institute at the University of Utah, *The Impact of High-Density Apartments on Surrounding Single-Family Home Values in Suburban Salt Lake County* (2021).

² Matthews, J. (2006). *The Effect of Proximity to Commercial Uses on Residential Prices*. Doctoral Dissertation. Atlanta, GA: Georgia State University and the Georgia Institute of Technology.

Enabling Act, 1922³ and CGS Section 8-2 prior to 2021⁴). The Commission not only needs to be conscious that the zoning enabling law allows the consideration of “conserving the value of buildings” *only* when adopting or amending regulations or deciding special exception applications but should be aware that the concept of *a view to conserving the value of buildings* needs to be contextualized to the time when it was written and the problems that zoning was designed to solve.

The 1920s context was the harsh conditions of the industrial city and the lack of regulatory provisions to deal with incompatible uses and the negative consequences of proximity. In addition to the *character of the district* and *conserving the value of buildings*, zoning was intended to protect us from *fire, panic, and other dangers*, conditions that no longer threaten us in the ways they did in the 1920s industrial city. Simply stated, zoning (along with other policies and regulations) has successfully solved the problem of the industrial city and has created stability and predictability in real property markets.

Today, the way in which we need to conceptualize *the character of the district* and *conserve the value of buildings* has changed. That is, in most cases, dissimilar uses have been segregated into individual zones. For example, residential uses in residential zones and industrial uses in industrial zones—as is the case in Ledyard (and this application). In addition, the dissimilarity in uses has been greatly reduced over time, as shifts in industry have reduced many of the most noxious uses. Therefore, the negative impacts on adjacent and proximate property have mostly been reduced to the most undesirable land uses. For example, uses such as airports, landfills, refineries, and superfund sites. In fact, the impact of such uses on residential and other proximate uses has been extensively studied and documented as having negative impacts on property values (Bell, 1998, 2001; Findlay and Phillips, 1991; Cartee, 1989; Hurd, 2002; Simons, 1997).⁵

However, such concerns and claims of the negative impact created by other dissimilar uses—uses that do not have the same characteristics as these undesirable land uses—have persisted in the land use application process. The academic and industry research on the impact of dissimilar uses (commercial, industrial, and residential) has consistently found either positive impacts, no negative impacts, or inconclusive findings on impact (Pollakowski, et. al, 2005; Hoffman, 2003; Eskic, 2021; Wiley, 2015; Loyer, 2010; Corliga, et al., 2006; Johnson, et al., 2009).

Specific to industrial development, a researcher at Georgia State University conducted a comprehensive analysis of 1.5 million residential property sales, both proximate and distanced to new commercial development (for comparison) between 2006 and 2014 throughout Metropolitan Atlanta (Wiley, 2015).

³ Department of Commerce, United States, (1922, 1924): Standard State Zoning Enabling Act: Under Which Municipalities May Adopt Zoning Regulations.

⁴ It is important to note that in 2021, through P.A. 21-29, the State Legislature changed the language of the zoning enabling actions, Section 8-2 of the Connecticut General Statutes to remove “character” and replace with “physical site characteristics” and deleting reference to conserving building value. Section 8-2 does still allow, in the context of conditions of approval for special permits to protect the public health, safety, convenience and property value.

⁵ Bell, Randall, (1998): “The Impact of Detrimental Conditions on Property Values” *The Appraisal Journal*. 380-391. Bell, Randall, (2001): “The Impact of Airport Noise on Residential Real Estate” *The Appraisal Journal*. 312-321. Findlay, III and G. Phillips, “An Evaluation of the Impact of a Well-Designed Landfill on Surrounding Property Values” *The Appraisal Journal* (April 1991): 247-52. Cartee, Charles, P., (1989): “A Review of Sanitary Landfill Impacts on Property Values” *The Real Estate Appraiser and Analyst*. 43-46. Hurd, Brian, H., (2002): “Valuing Superfund Site Cleanup: Evidence of Recovering Stigmatized Property Values” *The Appraisal Journal*. 426-437. Simons, Robert A., Bowen, William, and Arthur Sementelli, Author, (1997): “The Effect of Underground Storage Tanks on Residential Property Values in Cuyahoga County, Ohio” *Journal of Real Estate Research*. Vol 14, 29-42.

In addition, the study made great attempts to account for similarities in properties, such as the number of bedrooms, bathrooms, and other characteristics (property characteristics and amenities that influence value) between the proximate and distanced properties. Furthermore, the study evaluated three categories of commercial development: industrial, office, and retail. Wiley's (2015) findings specific to *industrial development* are interesting and relevant to this application. Wiley found that properties "in close proximity to industrial development sites" may experience "a localized contraction in house price...during the predevelopment period {...} yet the existing trend [in property value] is largely unaffected in the period that follows an industrial development completion" (Wiley, 2015: p. 3-4).⁶

A recent and relevant study in 2022 from the Phoenix Center for Advanced Legal & Economic Public Policies Studies, *What is the Effect of Rock Quarries on Home Prices? An Empirical Analysis of Three Cities*, found no evidence that quarries reduce home values. While the proposed application before the Ledyard Planning and Zoning Commission is not for a quarry, the site preparation activities and extraction of earth material are similar to the activities of a quarry use. The researcher who authored this study, George S. Ford, PhD explains:

For many Americans, a home is their most valuable asset. Naturally, the threat of a reduction in home values causes concern, which leads to opposition to several sorts of economic development projects and essential infrastructure. Opposition to rock quarries is one example. Evidence on the effects of quarries on home values is scant; the studies are often limited to a single city, leading to questions about generalizability, and use home sales occurring long after the quarry begins operations, introducing selection bias. In this POLICY PAPER, I apply multiple empirical methods to data on homes sales from three cities in Ohio. I find no evidence to suggest quarries reduce home values. I also offer evidence to suggest that the typical approach to quantify such effects—a home's distance from the quarry—may be unreliable given the idiosyncrasies of real estate markets.⁷

My professional and expert land use experience and opinion are in line with Wiley (2015) and Ford (2022). That is to say, over 30 years of dealing with land use applications, as a municipal planner, a consultant for municipal zoning commissions, and a consultant for developers, I have consistently found that new commercial development (office, retail, hotel, industrial, and multi-family rental) does not negatively impact the quality of life or property values of neighboring and proximate properties—even though such claims are consistently raised at zoning hearings.

The Gales Ferry Intermodal Site is a large, approximately 165-acre industrial site in an industrial zone, with a long history of industrial activity and uses. The land uses have included manufacturing, chemical processing and storage (tank farms), a rail line, a deep-water pier, and storage of materials. This property has existed as a heavy industrial site for decades and has been in industrial use for over 100 years. Therefore, in the context of local unwanted land uses, if this site and the associated uses were proposed today, I am confident to say that application would face a strong NIMBY response and opposition. In addition, in the context of land uses, its heavy industrial use could fall into the category of the most undesirable land uses, such as airports, landfills, refineries, and superfund sites that have been found to have negative impacts on neighboring and proximate residential property values (Bell, 1998, 2001; Findlay

⁶ Wiley, Jonathan, A., (2015): "The Impact of Commercial Development on Surrounding Residential Property Values". *Georgia State University*.

⁷ George S. Ford, 2022: Phoenix Center Policy Paper No. 57 *What is the Effect of Rock Quarries on Home Prices? An Empirical Analysis of Three Cities*. Phoenix Center for Advanced Legal & Economic Public Policies Studies.

and Phillips, 1991; Cartee, 1989; Hurd, 2002; Simons, 1997).⁸ If that is the case, then neighboring and proximate residential properties may already be negatively impacted by the industrial use. To put it another way, those negative impacts on property value may already be capitalized into the value of neighboring and proximate residential properties.

In the context of the proposed industrial development and the related site preparation activities, the proposed use and activities are located on the southern third of the site. The existing site is approximately 1,500 feet wide (east to west) and approximately 5,000 feet long (north to south)—nearly a mile long. Therefore, the closest residential uses (properties) to the proposed 40 acres of land that are part of the present application, are approximately 260 feet away on the eastern side of Route 12, and approximately 500 feet away on the south side of a 200+ foot hill and on the other side of energy supply power lines and right-of-way.

In the context of assessing the potential of impact by local undesirable land uses on neighboring and proximate residential properties, the key factors are sight, sound, smell, health, safety, and tenure. The following are specific considerations of these factors:

- **Sight:** The proposed activities as part of this application will not be visible to properties to the south, east, and north. There will be limited seasonal visibility while driving south on Route 12. The proposed activities will be visible from the river (west) and have some limited visibility from across the river—however, the line of sight of the closest residential property across the river is oriented to the north, not to the area of the proposed activity.
- **Sound:** The primary sounds created by the proposed activities will be blasting of rock, moving of rock and earth materials, and processing of rock on site. Properties to the south and east will be shielded from these sounds by the topography, properties to the north area furthest from the activities (over a half mile away), and properties to the west are most likely to hear these sounds. However, it should be noted that the State Fire Marshal's Office and local Fire Marshal regulate the blasting activity, and all activities will be conducted during normal business hours. Sounds coming from an industrial site during business hours should already be expected.
- **Smell:** None of the proposed activities are likely to produce foul odors different than those odors already associated with the industrial use of the site.
- **Health:** There is nothing about the proposed use and activities contained in this application that raises concerns about health threats off-site. Blasting is regulated by the State and local Fire Marshal offices and the State DEEP regulates all other potential health threats that would be contained on site.

⁸ Bell, Randall, (1998): "The Impact of Detrimental Conditions on Property Values" *The Appraisal Journal*. 380-391. Bell, Randall, (2001): "The Impact of Airport Noise on Residential Real Estate" *The Appraisal Journal*. 312-321. Findlay, III and G. Phillips, "An Evaluation of the Impact of a Well-Designed Landfill on Surrounding Property Values" *The Appraisal Journal* (April 1991): 247-52. Cartee, Charles, P., (1989): "A Review of Sanitary Landfill Impacts on Property Values" *The Real Estate Appraiser and Analyst*. 43-46. Hurd, Brian, H., (2002): "Valuing Superfund Site Cleanup: Evidence of Recovering Stigmatized Property Values" *The Appraisal Journal*. 426-437. Simons, Robert A., Bowen, William, and Arthur Sementelli, Author, (1997): "The Effect of Underground Storage Tanks on Residential Property Values in Cuyahoga County, Ohio" *Journal of Real Estate Research*. Vol 14, 29-42.

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- **Safety:** The same comments are made about the aforementioned health. No safety threats would be anticipated off-site.
 - **Tenure:** Relates to owner versus renter occupancy of neighboring and proximate residential properties. While most such properties are owner-occupied, the form of tenure with the greater risk of negative impact, the minimal issues or concerns regarding the five above factors for consideration, negates the concern of impact.

Based on the above assessment of the key factors of sight, sound, smell, health, safety, and tenure, the chance of negative off-site impacts, including impacts on property value is minimal, at best. Add to this the academic and industry research, and my professional experience with land use and development projects, including the impacts on neighboring and proximate properties, and I find it unlikely the proposed application for industrial development, and the related site preparation activities, that negative impacts to property values or quality of life will arise from this proposed application if it were to be approved. The subject property is an industrial site, in an industrial zone, and the proposed use and activities are consistent with what is expected of such industrial use and zone. In addition, this industrial site and zone have coexisted with the neighboring and proximate residential uses and properties for decades. The proposed application will create little change or difference in the overall area.

I thank you for your time and consideration.

Respectfully submitted,



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